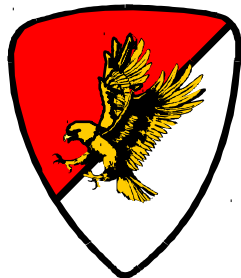


This Flight Information Handbook was developed by the 21st Cavalry Brigade and is not required to be used to fly at Ft. Hood

It is a useful cockpit tool when operating here at Ft. Hood and you or your unit may use all or any part of this handbook and modify it in any way that meets your needs

This FIH contains changes to facilitate the 2011 CARS changes and is effective on or after 1 August

21st CAVALRY BRIGADE



FORT HOOD. TEXAS

Flight Information Handbook AUG 11



CONTINUE THE ATTACK

PHONE ROSTER *Local Area Code (254)*

BRIGADE	TITLE	OFFICE	CELL
COL HERSEY	BDE CDR	288-2301	
LTC MENJIVAR	XO	553-1570	
LTC GALVAN	S-3	288-2304	
CPT ATKINS	ASST S-3	288-2304	
CW5 GREEN	BDE SIP	285-2069	
CW5 BONNEAU	BDE ASO	532-9850	
CW4 GREER	BAMO	288-2321	
RICHARD IRIZARRY	BDE ASO	532-9850	

MISCELLANEOUS

Multi - Ship/Formation flight brief

- Type formation(s) for T/O, En-route & Landing.
- Routes.
- Altitudes.
- Airspeeds.
- Lighting.
- Placement of aircraft in formation (Line up, in flight, HA & AA).
- Spacing.
- Lead change procedure.
- Weather.
- IIMC break up procedure.
- Communications / Lost Commo & IDM sub ID's.
Primary & alternate frequencies, Commo check time & procedure, responsibilities (TWR, flight following, land group call, internal A/A, etc.).
- Transponder responsibility (primary & alternate).
(All aircraft are required to squawk on reservation).
- AMC & flight chain of command.
- Navigation responsibilities.
- Loss of visual contact / In-flight linkup procedures.
- PL / Emergency flight procedures.
- Actions on Contact.

HAVE QUICK 2 DATA TABLE					
1	2	3	4	5	6
300.050	300.050	300.050	300.050	300.050	300.050
376.000	287.400	297.600	314.300	359.100	297.600
359.100	376.000	287.400	297.600	314.300	376.000
314.300	359.100	376.000	287.400	297.600	359.100
297.600	314.300	359.100	376.000	287.400	314.300
287.400	297.600	314.300	359.100	376.000	287.400
7	8	9	10	11	12
300.050	300.050	300.050	300.050	300.050	300.050
314.300	359.100	376.000	287.400	314.300	359.100
287.400	297.600	314.300	359.100	297.600	314.300
376.000	287.400	297.600	314.300	376.000	287.400
359.100	376.000	287.400	297.600	359.100	376.000
297.600	314.300	359.100	376.000	287.400	297.600
13	14	15	16	17	18
300.050	300.050	300.050	300.050	300.050	300.050
376.000	287.400	297.600	359.100	376.000	287.400
359.100	376.000	287.400	314.300	359.100	376.000
297.600	314.300	359.100	297.600	314.300	359.100
287.400	297.600	314.300	376.000	287.400	297.600
314.300	359.100	376.000	287.400	297.600	314.300
19	20	21	22	23	24
300.050	300.050	300.050	300.050	300.050	300.050
297.600	314.300	314.300	359.100	376.000	287.400
287.400	297.600	376.000	287.400	297.600	314.300
376.000	287.400	359.100	376.000	287.400	297.600
314.300	359.100	297.600	314.300	359.100	376.000
359.100	376.000	287.400	297.600	314.300	359.100
25	26	27	28	29	30
300.050	300.050	300.050	300.050	300.050	300.050
297.600	359.100	376.000	287.400	297.600	314.300
359.100	297.600	314.300	359.100	376.000	287.400
314.300	376.000	287.400	297.600	314.300	359.100
287.400	314.300	359.100	376.000	287.400	297.600
376.000	287.400	297.600	314.300	359.100	376.000
31	TSET FREQ'S				
300.050	1 - 235.050	7 - 262.450	13 - 293.550		
376.000	2 - 225.150	8 - 257.250	14 - 289.050		
314.300	3 - 252.925	9 - 314.450	15 - 284.150		
297.600	4 - 239.950	10 - 308.750	16 - 279.750		
359.100	5 - 271.950	11 - 303.275			
287.400	6 - 267.850	12 - 298.650	21 CAV HQ2 NET - 01.525		

COMSEC LOADING PROCEDURES

IFF Loading

1. Connect SKL to MSFP
2. Set MSFP to first position left of "IFF"
3. Turn ANCD-ON
4. Select Radio (Press Enter)
5. Select COMSEC (Press Enter)
6. Select LD (Press Enter)
7. Select KEK (Press Enter)
8. Page Down to 1A (Press Enter)
9. Ensure 1A is ready to XMT
10. Page Down to 1 B (Press Enter)
11. Ensure 1 B is ready to XMT
12. Highlight QUIT (Press Enter)
13. At command "LOAD" 00 RT, Rotate MSFP to IFF position
14. Check ANCD for sending 1A message followed by "Xferred Successful"
15. At command press "LOAD" 00 MSFP left of IFF Position then "Back"
16. Check ANCD for sending 1B Message followed by 1 B "Xferred Successful"

EGI 1 & 2 Loading

1. Connect SKL to MSFP
2. Set MSFP to L or R of EGI #1 Position
3. Turn ANCD - ON
4. Select Radio (Press Enter)
5. Select COMSEC (Press Enter)
6. Select LO (Press Enter)
7. Select. TEK (Press Enter)
8. Page Down to GPS Keys
9. Right Arrow (Press Enter)
10. Check for "sending TEK Keys" message 12 Check for "message Xferred"

-

FM-1 & 2 Loading

1. LMP Select desired FM Radio (ENTER)
2. LMP Select ALL (Press Enter)
3. Connect SKL to MSFP and switch MSFP to L or R of desired Radio
4. Turn SKL-ON
5. Select RADIO (Press Enter)
6. Select SEND (Press Enter)
7. Select RADIO (Press Enter)
8. Select ICOM (Press Enter)
9. Rotate MSFP to desired RT (Press Enter)
10. Don't include time (Press Enter)
11. Ensure "Load in Progress" message on LMP
12. Ensure "Load GO" message on LMP

UHF KY 58 Loading

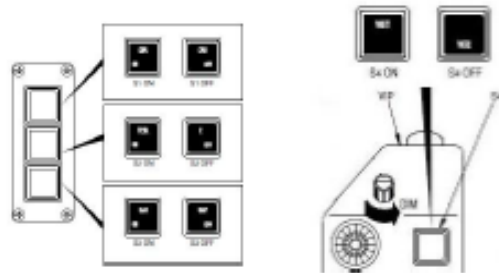
1. Press MAIN MENU
2. Select SEND (Press Enter)
3. Select RADIO (Press Enter)
4. Select ABN (Press Enter)
5. Select YES (Press Enter)
6. Press Enter Again
7. Ensure KY-58 is loading (Press Enter)
8. Select Fill Position on KY-58
9. Select Remote Override on LMP
10. Select PTT on LMP
11. Repeat for remaining fills
12. Select Remote Override OFF
13. Select KY-58 Mode on CYPHER
14. Press MAIN MENU
15. Press and Release ON/OFF Button

HOOD AAF FREQUENCIES			
FACILITY	VHF	UHF	FM
LIFESAVER			38.30
HOOD GROUND	133.85	225.40	
HOOD TOWER	119.65	269.45	41.50
CLEARANCE DELIVERY		225.40	
METRO		306.50	41.20
RANGE & TRAINING AREA FREQUENCIES			
HOOD RADIO	143.10	357.90	38.75
LOMETA REMOTE	149.80	245.6	
RANGE CONTROL			PRI-30.45 ALT-38.20
LG 1, 2, 3 Strip 41 Longhorn/ Shorthorn	LHN TWR 143.0	LHN TWR 237.50	64.35 38.90
LG 4, 5, 6 Strip 12			46.70
Land Group 7 (TA 70-74)			44.40
Test Flight Area 3 & 5	122.75		
GRAY AAF FREQUENCIES			
GRK APP CONTROL (E)	124.55	370.00	

LOCAL AREA FREQUENCIES					
FACILITY		VHF	UHF	FM	
GRAY GCA		118.95	254.40		
SKYLARK ATIS		128.575			
SKYLARK UNICOM		122.70			
TEMPLE UNICOM		123.00			
SAN ANGELO RADIO		122.25	255.40		
EMERGENCY GUARD FQ's		121.50	243.00	40.50	
NON-DIRECTIONAL BEACONS (NDB)					
HOOD NDB/ RANGE INFO		347	PV 2280 4456		
STARN (GR)		323	PV 0687 4882		
IRESH (IL)		278	PV 2326 3292		
21 ST CAV BDE COMM SETS					
COMSET	ID	VHF	UHF	FM1	FM2
1	COMMO	149.30	321.475	35.325	66.45
2	TAXI	HLR GND 133.85	HLR GND 225.45	35.325	66.45
3	HOOD	HLR TWR 119.65	HLR TWR 269.45	35.325	66.45
4	EAST	HLR RDO 143.10	HLR RDO 357.90	EAST 64.35	66.45
5	WEST	HLR RDO 143.10	HLR RDO 357.90	WEST 46.70	66.45
6	IIMC	GRK APP 120.075	GRK APP 323.15	35.325	66.45
7	TEMPLE	TPL CTAF 123.00	HLR RDO 357.90	35.325	66.45

VUIT-2 OPERATOR CHECKLIST (A-KIT ONLY)

1. **Flight Video Recorder and Sensor Setup**
 - a. Power up Video Recorder and Apache sensors IAW normal operating procedures.
 - b. VCR - Select PLAY and select VSEL.
2. **Power-ON**
 - a. VPP - CPU ON. (S1)
 - b. VPP - TCDL ON. (S2)
 - c. VPP - UAV ON. (S3)
 - d. VIP - Select VUIT. (S4)



3. **BIT**
 - a. VIP - Select Key 2.
 - b. Verify no BIT failure is present.
4. **Mini - TCDL Preset Frequency Selection**
 - a. VIP - Select Key 2 (use keys 7 and 9 to scroll).
5. **Mini - TCDL Manual Frequency Entry**
 - a. VIP - Select Key 2.
 - b. VIP - Select Key #.
 - c. Input RL Frequency.
 - d. VIP - Select Key #.
 - e. VIP - Input FL Frequency.
 - f. VIP - Select Key #.

VUIT-2 OPERATOR CHECKLIST (A-KIT ONLY)

6. **Transmit to OSRVT**
 - a. VIP - Select Key 0.
7. **Mini - TCDL Frequency Deletion**
 - a. VIP - Select Key 2.
 - b. VIP - Select frequency to delete (use keys 7 and 9 to scroll).
 - c. VIP - Select Key *.
 - d. VIP - Select Key # to confirm or Key * to abort.
8. **Power-Off**
 - a. VIP - Select Key 0 to stop Apache sensor data downlink.
 - b. VIP - Press and hold Key * for 8 seconds.
 - c. VIP - Select VCR. (S4)
 - d. VPP - Select UAV OFF. (S3)
 - e. VPP - Select TCDL OFF. (S2)
 - f. VPP - Select CPU OFF. (S1)

VUIT-2
OPERATOR CHECKLIST (A-KIT AND B-KIT)

1. **Video Recorder and M-TADS Setup**
 - a. Power up Video Recorder and M-TADS IAW normal operating procedures.
 - b. VCR - Select **PLAY** and select **VSEL**.
2. **Power-ON**
 - a. VPP - CPU ON. (S1)
 - b. VPP - TCDL ON. (S2)
 - c. VPP - UAV ON. (S3)
 - d. VIP - Select VUIT. (S4)
3. **BIT**
 - a. On VIP, press key 2.
 - b. Verify no BIT failure is present.
4. **Mini - TCDL Preset Frequency Selection**
 - a. VIP - Select Key 2 (use keys 7 and 9 to scroll).
5. **Mini - TCDL Manual Frequency Entry**
 - a. VIP - Select Key 2.
 - b. VIP - Select Key #.
 - c. VIP - Input RL Frequency.
 - d. VIP - Select Key #.
 - e. VIP - Input FL Frequency.
 - f. VIP - Select Key #.
6. **Mini – TCDL Frequency Deletion**
 - a. VIP – Select Key 2.
 - b. VIP – Select frequency to delete (use keys 7 and 9 to scroll).
 - c. VIP – Select Key *.
 - d. VIP – Select Key # to confirm or Key * to abort.
7. **UAV Preset Frequency Selection**
 - a. VIP - Select Key 4 (use keys 7 and 9 to scroll).
 - b. VIP - Select Key 1 to accept.
8. **UAV Manual Frequency Entry**
 - a. VIP - Select Key 4.
 - b. VIP - Select Key #.
 - c. VIP - Select UAV type (use keys 7 and 9 to scroll).
 - d. VIP - Select Key #.
 - e. VIP - Input Video Frequency.
 - f. VIP - Select Key #.
 - g. VIP - Input Data Frequency.
 - h. VIP - Select Key #.
9. **UAV Frequency Deletion**
 - a. VIP – Select Key 4.
 - b. VIP – Select frequency to delete (use keys 7 and 9 to scroll).
 - c. VIP – Select Key *.
 - d. VIP – Select Key # to confirm or Key * to abort.
10. **Transmit to OSRVT**
 - a. VIP - Select Key 0.
11. **Power-Off**
 - a. VIP - Select Key 0 to stop UAV and Apache sensor data downlink.
 - b. VIP - Press and hold Key * for 8 seconds.
 - c. VIP - Select VCR. (S4)
 - d. VPP - Select UAV OFF. (S3)
 - e. VPP - Select TCDL OFF. (S2)
 - f. VPP - Select CPU OFF. (S1)

ATM Crew Briefing Checklist

- 1. Mission Overview.**
- 2. Flight Plan/Risk Assessment.**
- 3. Weather.** Departure, en route, destination, and void time.
- 4. Flight Route.**
- 5. Airspace Surveillance procedures.** (Task 1026)
- 6. Required items.**
 - a. Personnel.
 - b. Professional.
 - c. Survival / Flight Gear.
- 7. Crew Duties and responsibilities.**
 - a. Transfer of flight controls
 - b. Two Challenge Rule / Comfort Zone.
 - c. Elements of Crew Coordination:
 - (1) Communicate Positively.
 - (2) Direct Assistance.
 - (3) Announce Actions
 - (4) Offer Assistance
 - (5) Acknowledge Actions
 - (6) Be Explicit
 - (7) Provide ACFT Control & Obstacle Advisories
 - (8) Coordinate Action Sequence & Timing
- 8. Emergency Actions.**
 - a. Dual Engine Failure.
 - b. Dual HYD failure/ Emergency Hydraulic Button.
 - c. Fuel PSI ENG 1 and 2 (FUEL Page).
 - d. Engine Failure OGE Hover.
 - e. Loss of Tail Rotor.
 - f. Actions to be performed by P* and P.
 - g. Portable Fire Extinguisher.
 - h. First Aid Kits, ELT.
 - i. Egress procedures and rendezvous point.
 - j. Canopy Jettison.
 - k. Emergency Stores Jettison (JETT).
 - l. Power Lever Manipulation.
 - m. CHOP Button.
 - n. Engine and APU Fire Buttons / Extinguishing Bottles.
 - o. Loss of ICS/CIU.
 - p. Unusual Attitude Recovery.
 - q. Simulated Emergencies.
- 9. General Crew Duties.**
 - a. Pilot on the Controls (P*).**
 - (1) Fly the aircraft w/ Primary focus outside - VMC, inside - IMC.
 - (2) Avoid traffic and obstacles.
 - (3) Cross check HMD symbology/flight page, messages, limitation. timers/limiting indications, torque/TGT, wind velocity/direction and engine/system pages as appropriate.
 - (4) Monitor/transmit on radios as directed by the PC.

Crew Briefing Checklist (Cont'd)

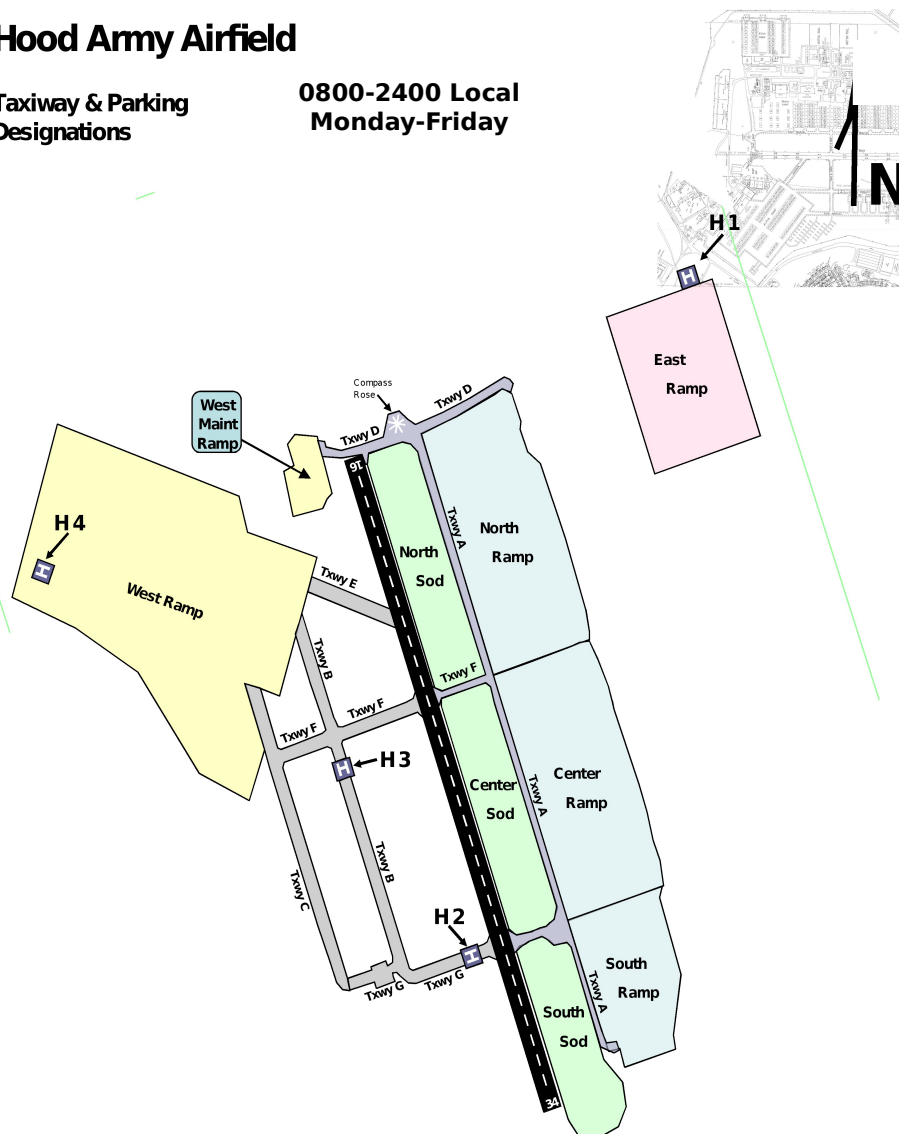
- b. Pilot not on the controls (P).
 - (1) Assist in traffic and obstacle avoidance.(
 - (2) Manage radio network presets and set transponder.
 - (3) Navigate.
 - (4) Copy clearances, ATIS, and other information.
 - (5) Cross check MPD pages (e.g. ENG/SYS, PERF, FLT) and/or instruments (PLT).
 - (6) Monitor/transmit on radios as directed by the PC.
 - (7) Read and complete checklist items as required.
 - (a) Internal / BS external lighting.
 - (b) Anti-ice / De-ice systems.
 - (c) Other systems / systems as required.
10. Both Pilots.
 - a. MPD/VSEL/ACQ setting considerations.
 - b. WPNs, FCR, and ASE considerations (as applicable).
 - c. Monitor radios.
 - d. Monitor aircraft performance.
 - e. Monitor each other.
 - f. Announce when focused inside for more than 4 seconds (VMC) or as appropriate to the current briefed situation.
- 11. IMC Crew Duties**
 - a. Inadvertent IMC.
 - b. During IFR Operations.
 - (1) ITO/Note takeoff time.
 - (2) Level off check.
 - (3) Calculate & monitor times for holding & approaches.
 - (4) Approach/holding brief.
 - (5) When on approach, P watch for the airfield.
 - (6) On breakout & landing environment in sight, notify P* & if directed by the PC, land the aircraft.
 - (7) Be prepared to direct the P* for the missed approach.
 - (8) Navigation Programming.
- 12. Analysis of the Aircraft**
 - a. Logbook & Preflight deficiencies.
 - b. Performance planning (Approved Software, PPC, PERF page).
 - (1) ETF/ATF TGT limiter settings and cockpit indications.
 - (2) Re-compute PPC, if necessary.
 - (3) GO/NO-Go Data.
 - (4) Single Engine capability - Min/Max SE TAS.
 - (5) Fuel Requirements.
 - (6) Performance Limitations / Restrictions.
 - c. Mission Deviations required based on aircraft analysis.
- 13. Tail Wheel Lock/Unlock.**
- 14. Refuel/Rearm Procedures.**
- 15. Fighter Management.**
- 16. Risk Mitigation / Considerations.**
- 17. Questions, comments and acknowledge brief.**
- 18. CONDUCT WALK AROUND INSPECTION.**

Airfield Diagram Hood Army Airfield

Hood Army Airfield

Taxiway & Parking
Designations

0800-2400 Local
Monday-Friday

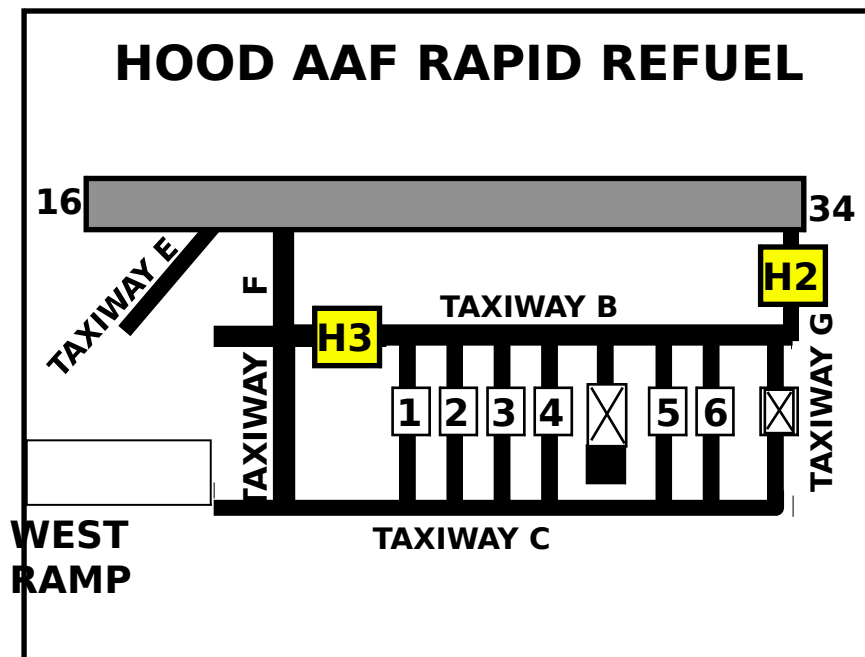
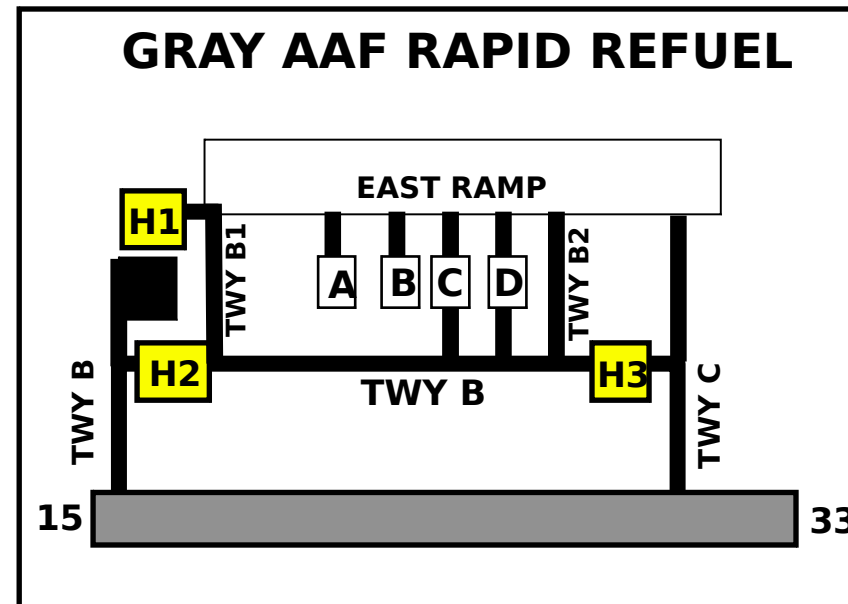
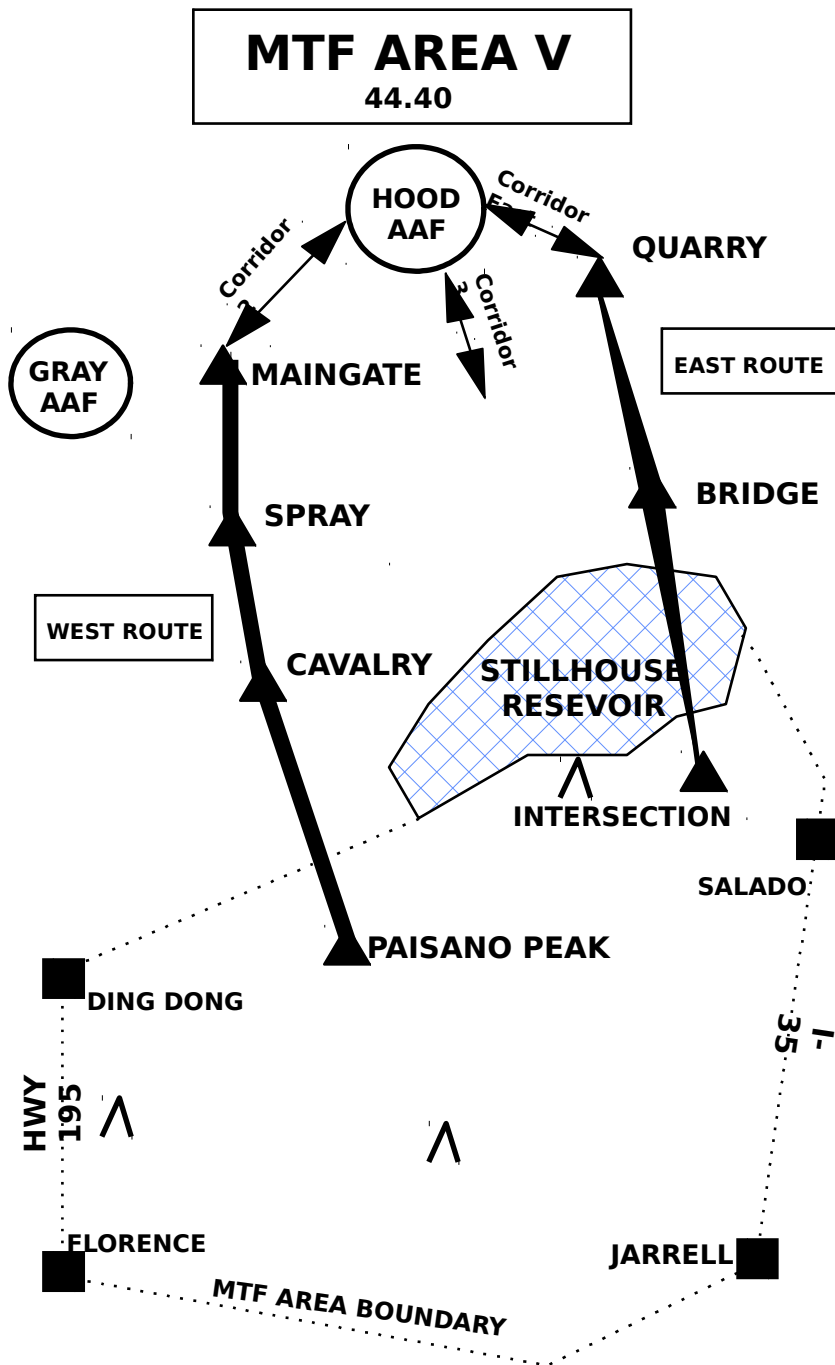


HLR Freqs

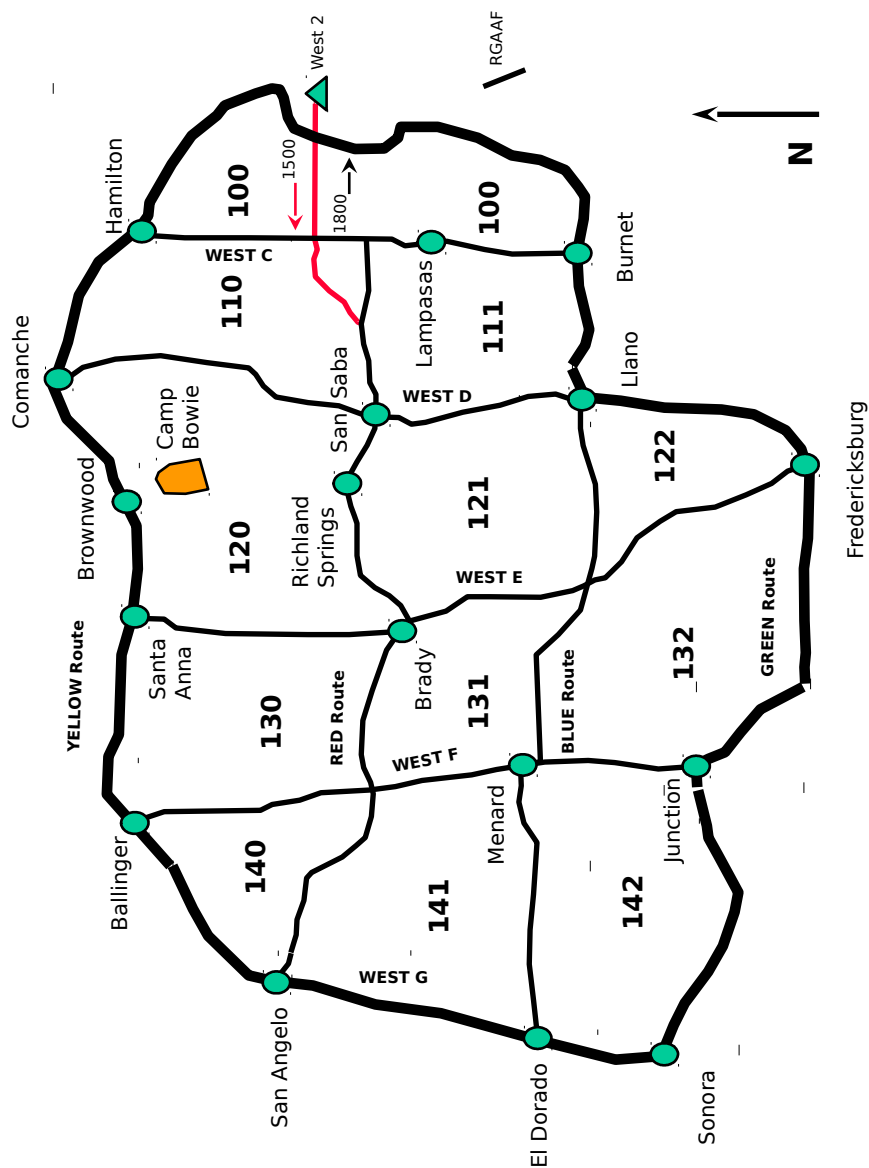
Hood Tower 119.650 269.450
Ghd Control 133.850 225.400
Cinc Del 225.400

Gray App Con 120.075 323.150
GRK ATIS 118.800

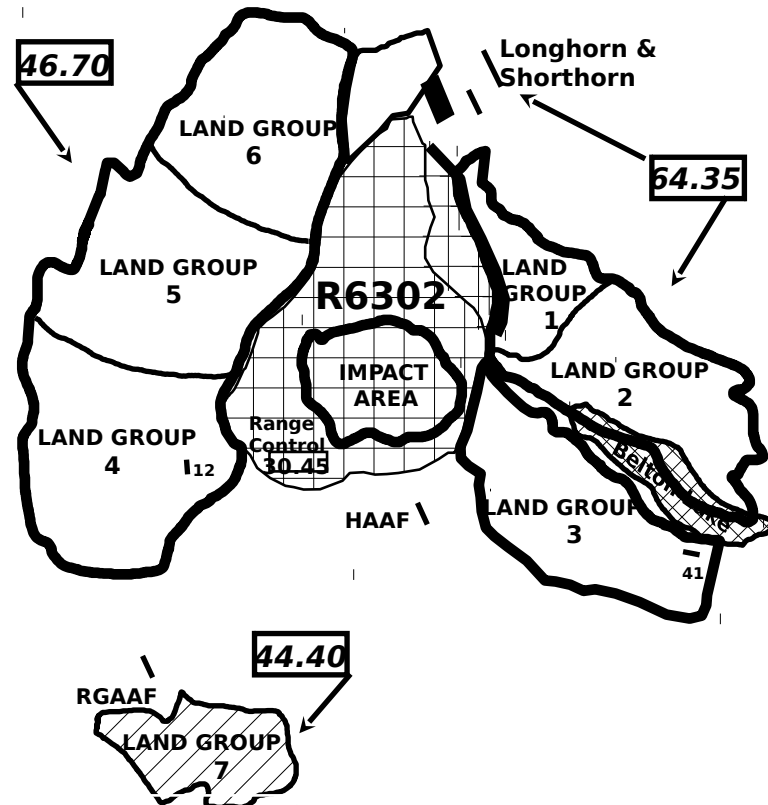
PARKING PAD		14R- PV-	Elev 924'	WGS - 84	
1	2174-4621	34	2218-4597	67	2206-4591
2	2180-4619	35	2221-4596	68	2208-4590
3	2178-4620	36	2170-4613	69	2210-4589
4	2180-4619	37	2175-4611	70	2213-4589
5	2189-4618	38	2177-4610	71	2215-4588
6	2186-4617	39	2180-4609	72	2217-4587
7	2188-4617	40	2182-4609	73	2176-4600
8	2191-4615	41	2184-4608	74	2178-4600
9	2192-4614	42	2186-4607	75	2181-4599
10	2194-4614	43	2189-4606	76	2183-4598
11	2196-4613	44	2195-4604	77	2185-4597
12	2199-4612	45	2197-4603	78	2191-4595
13	2201-4611	46	2199-4602	79	2194-4592
14	2203-4611	47	2202-4601	80	2196-4591
15	2171-4615	48	2204-4600	81	2198-4591
16	2174-4615	49	2206-4599	82	2200-4590
17	2176-4613	50	2208-4595	83	2203-4589
18	2177-4612	51	2211-4597	84	2205-4589
19	2180-4612	52	2213-4596	85	2207-4588
20	2182-4610	53	2215-4596	86	2210-4587
21	2184-4610	54	2218-4595	87	2212-4586
22	2186-4609	55	2220-4594	88	2214-4586
23	2188-4607	56	2197-4603	89	2216-4586
24	2188-4605	57	2179-4601	90	2174-4594
25	2198-4604	58	2182-4600	91	2176-4593
26	2200-4603	59	2184-4600	92	2178-4592
27	2202-4602	60	2186-4600	93	2180-4591
28	2205-4602	61	2192-4597	94	2183-4591
29	2207-4601	62	2194-4596	95	2189-4588
30	2209-4600	63	2197-4595	96	2191-4587
31	2211-4599	64	2199-4594	97	2193-4587
32	2214-4599	65	2202-4593	98	2196-4587
33	2216-4598	66	2204-4592	99	2198-4585



WESTERN TRAINING AREA



FORT HOOD LAND GROUPS



LASER FIRING POINTS

14R

A	PV 2830 5089	285° - 301°	H	PV 1824 5622	081° - 119°
B	PV 2885 5480	223° - 248°	I	PV 1841 4848	011° - 036°
C	PV 2782 5685	190° - 210°	J	PV 2189 4920	352° - 045°
D	PV 2555 5788	162° - 182°	K	PV 2465 4875	333° - 015°
E	PV 2305 6981	154° - 210°	L	PV 1470 5300	053° - 068°
F	PV 2092 6900	120° - 192°	M	PV 2751 4986	304° - 339°

MISSION 1 - WAYPOINTS / HAZARDS						
AC	ID	Description	MGRS	Latitude	Longitude	Elev
H01	---	TOWER - UNDER 1000'	14R PV 1967 7247	N 31 22.837	W097 44.492	889
H02	---	TOWER	14R PV 3050 3053	N 31 00.070	W097 37.983	698
H03	---	TOWER	14R PV 5893 6736	N 31 19.788	W097 19.772	751
H04	---	TOWER	14R PV 6005 6781	N 31 20.022	W097 19.063	807
H05	---	TOWER - UNDER 1000'	14R PV 3117 6290	N 31 17.583	W097 37.310	984
H06	---	TOWER - UNDER 1000'	14R PV 3220 6299	N 31 17.624	W097 36.658	944
W07	MAP	GRK 15	14R PV 1112 3904	N 31 04.795	W097 50.105	1015
W08	MAP	GRK 33	14R PV 1230 3628	N 31 03.292	W097 49.384	961
W09	MAP	TPL 33	14R PV 5194 4660	N 31 08.613	W097 24.367	669
W10	MAP	HLR 34	14R PV 2271 4519	N 31 08.052	W097 42.772	889
W11	MAP	TPL 15	14R PV 5134 4843	N 31 09.603	W097 24.730	685

MISSION 1 - CONTROL MEASURES						
AC	ID	Description	MGRS	Latitude	Longitude	Elev
C51	IHS	IHS AZ	14R PV 4486 6812	N 31 20.310	W097 28.638	741
C52	GR-	STARN NDB	14R PV 0691 4875	N 31 10.071	W097 52.694	859
C53	GUO	GUO NDB	14R PU 2644 9537	N 30 41.064	W097 40.794	779
C54	HLR	HA AF	14R PV 2255 4568	N 31 08.320	W097 42.870	924
C55	ACT	WACO REGL	14R PV 6813 9879	N 31 36.717	W097 13.657	501
C56	FRE	FARP EAST	14R PV 2454 6789	N 31 20.329	W097 41.451	833
C57	LZZ	LAMPASAS	14R NV 7668 4165	N 31 06.372	W098 11.754	1215
C58	TPL	TEMPLE	14R PV 5171 4727	N 31 08.975	W097 24.507	695
C59	CNW	TSTC WACO	14R PA 8274 0166	N 31 38.137	W097 04.384	439
C60	GUO	GEORGETOWN	14R PU 2658 9461	N 30 40.653	W097 40.712	757
C61	PWG	MCGREGOR	14R PV 6017 8445	N 31 29.026	W097 18.827	580
C62	HEN	HENRY	14R PV 1471 4772	N 31 09.471	W097 47.789	862
C63	EA3	EAST 3	14R PV 3347 6870	N 31 20.707	W097 35.814	682
C64	EA4	EAST 4	14R PV 2659 7488	N 31 24.099	W097 40.105	826
C65	WS4	WEST 4	14R PV 1296 7460	N 31 24.031	W097 48.710	961
C66	WS3	WEST 3	14R PV 0771 6900	N 31 21.029	W097 52.056	935
C67	WS2	WEST 2	14R PV 0372 5900	N 31 15.639	W097 54.635	967
C68	WS1	WEST 1	14R PV 0375 4800	N 31 09.684	W097 54.686	1033
C69	EA2	EAST 2	14R PV 4175 5325	N 31 12.284	W097 30.725	679
C70	EA1	EAST 1	14R PV 3845 4240	N 31 06.438	W097 32.890	767
C71	QUA	QUARRY	14R PV 3155 4420	N 31 07.462	W097 37.216	938
C72	BRI	BRIDGE	14R PV 2975 5298	N 31 12.223	W097 38.282	597
C73	TEN	TENAT	14R NV 8682 7323	N 31 23.425	W098 05.208	1223
C74	HIN	HINSI	14R PV 2882 2124	N 30 55.050	W097 39.108	757
C75	RUB	RUBUF	14R PV 1587 2799	N 30 58.785	W097 47.193	718
C76	AGJ	GOOCH SPRINGS	14R NV 8177 5048	N 31 11.130	W098 08.512	1290

C77	GRK	GRK AAF	14R PV 1174 3759	N 31 04.006	W097 49.723	1003
C78	FAD	FADXY	14R PV 5484 3778	N 31 03.813	W097 22.625	629
C79	LGN	LONGHORN	14R PV 2683 7173	N 31 22.389	W097 39.979	725
C80	SHN	SHORTHORN	14R PV 2624 7033	N 31 21.635	W097 40.360	728
C81	ROY	ROYOB	14R PV 1184 1393	N 30 51.199	W097 49.821	1079
C82	TIX	TIXFO	14R PV 2034 1759	N 30 53.128	W097 44.459	990
C83	HUH	HUHIF	14R PV 6712 3008	N 30 59.544	W097 14.982	564
C84	ESW	ESWUL	14R PV 5832 2718	N 30 58.052	W097 20.534	462
C85	S41	STRIP 41	14R PV 3583 4525	N 31 07.998	W097 34.516	731
C86	OKE	OKEST	14R PV 0236 5942	N 31 15.874	W097 55.488	1003
C87	NAB	NABCI	14R PV 0676 4919	N 31 10.313	W097 52.783	961
C88	L22	STRIP 22	14R PV 3745 5294	N 31 12.150	W097 33.434	875
C89	TEX	LZ TEXAS	14R PV 3750 5118	N 31 11.195	W097 33.417	839
C90	LUK	LZ LUKE	14R PV 3831 4858	N 31 09.782	W097 32.930	780
C91	FRW	FARP WEST	14R PV 1906 6740	N 31 20.097	W097 44.913	912
C92	KNB	BUSHY KNOB	14R PV 1087 6282	N 31 17.667	W097 50.106	1099
C93	S12	STRIP 12	14R PV 1026 5391	N 31 12.846	W097 50.549	928
C94	LPH	LASER PT H	14R PV 1826 5623	N 31 14.055	W097 45.492	938
C95	LPG	LASER PT G	14R PV 1807 5902	N 31 15.568	W097 45.594	892
C96	LPL	LASER PT L	14R PV 1469 5296	N 31 12.307	W097 47.763	797
C97	LPB	LASER PT B	14R PV 2889 5476	N 31 13.193	W097 38.809	669
C98	LPC	LASER PT C	14R PV 2785 5685	N 31 14.330	W097 39.452	862
C99	LPD	LASER PT D	14R PV 2553 5787	N 31 14.896	W097 40.904	770
C100	LPE	LASER PT E	14R PV 2307 6978	N 31 21.359	W097 42.364	892
C101	LPF	LASER PT F	14R PV 2070 6899	N 31 20.946	W097 43.865	833
C102	MNZ	HAMILTON	14R NA 8071 0367	N 31 39.927	W098 08.917	1289
C103	MNZ	HAMILTON NDB	14R NV 8085 9865	N 31 37.209	W098 08.852	1268
C104	BBD	BRADY NDB	14R MV 6926 4936	N 31 10.673	W099 19.355	1815
C105	ROB	ROBINSON NDB	14R PV 8345 8822	N 31 30.858	W097 04.088	387
C106	BWD	BWD REGL	14R NA 0423 1774	N 31 47.714	W098 57.317	1381
C107	BBD	BRADY AF	14R MV 6904 4948	N 31 10.740	W099 19.492	1817
C108	81R	SAN SABA	14R NV 2697 5568	N 31 14.098	W098 43.009	1259
C109	SJT	SAN ANGELO	14R LV 5768 7022	N 31 21.465	W100 29.778	1919
C110	SJ-	S ANGELO NDB	14R LV 4996 6169	N 31 16.794	W100 34.573	UNK
C111	MG-	MAIN GATE	14R PV 1728 4376	N 31 07.313	W097 46.200	892
C112	IL-	IRESH NDB	14R PV 2331 3298	N 31 01.442	W097 42.483	857
C113	FBU	FBURG	14R PV 4968 2388	N 30 56.330	W097 25.995	557
C114	RNG	RINGER	14R PV 2436 3985	N 31 05.150	W097 41.771	823
C115	BMQ	BURNET MUNI	14R NV 7288 0094	N 30 44.351	W098 14.318	1256
C116	IFD	IFDOH	14R PV 4834 5753	N 31 14.552	W097 26.535	2400

Ft. Hood Reg. 95-1
Rules & Regulations Summary

TRAFFIC PATTERNS (*Longhorn Tower operational M-F 0900-0100*)

- Longhorn East Only @ 1100' MSL (*unless otherwise directed*)
- Shorthorn West Only @1100' MSL (*unless otherwise directed*)
- Robert Gray/Hood 1500' MSL

SCHEDULED AIRSPACE

- Scheduled through DPTMS Range Division (FH 95-1 Format)
- Surface to 5000' MSL
- Unit must "activate" and "de-activate" with Hood Radio

WEATHER (*All training will terminate/recover at <500' ceilings*)

- Uncontrolled at or below 1200' AGL
 - ▶Day = Clear of Clouds, ½ SM Visibility
 - ▶Night = Clear of Clouds, 1 SM Visibility
- Special VFR is same as above for Day & Night
- Special requirements WX < 1000-3
 - ▶One Radio tuned to GRK Approach Control
 - ▶NAVAID for Approach Tuned
 - ▶Emergency GPS Approach route selected as current route

Ft. Hood Reg. 95-1

Rules & Regulations Summary (Continued)

AIRFIELD CORRIDORS - Outbound 1500' MSL, Inbound 1800' MSL

- Maximum airspeed 90 KIAS
- Night Operations in airfield corridors require Landing Light-ON and Position Lights-BRIGHT
- Low-Level (200' AGL and below) departures/arrivals via checkpoint Bridge when approved by HAAF Tower.

NIGHT OPERATIONS

- Lighting Requirements

▶SCHEDULED AIRSPACE (**Black-out operations**)

● **High bird/O/C required** - fully lighted - must monitor land group frequency at all times

● All aircraft - monitor common air to air frequency. May use land group frequency to monitor but will not conduct operations on that frequency

● ROZ incursion (Non participating A/C) - all aircraft, immediately full lighting until problem resolved

▶ SCHEDULED AIRSPACE: (**Minimal Lighting**)

● Single ACFT: Position Lights-STEADY DIM, Anti-Collision-OFF

● Formation FLT: Position Lights - STEADY DIM, Trail aircraft must have Anti-Collision-ON. Other aircraft - Anti-Collision-OFF. Except in numbered Corridors.

▶ OTHER THAN SCHEDULED AIRSPACE:

● Single ACFT: Position Lights-STEADY BRIGHT, Anti-Collision-ON

● Formation FLT: Trail aircraft must have Position STEADY BRIGHT, Anti-Collision-ON. Other aircraft

Lights-
may be

APPROACH CHECKS

1. ATIS/ Weather - Check
2. Altimeters - Set (P)
3. ADF/ Comm - Check
4. TSD Route - Check/Select
5. Intentions - Reported
6. Radar Alt.(MDA/DH) - Set
7. Approach Brief - Complete

TYPE APPROACH _____

MSA _____ AIR SPD _____

ENTRY _____ BRNGS / ALTs _____

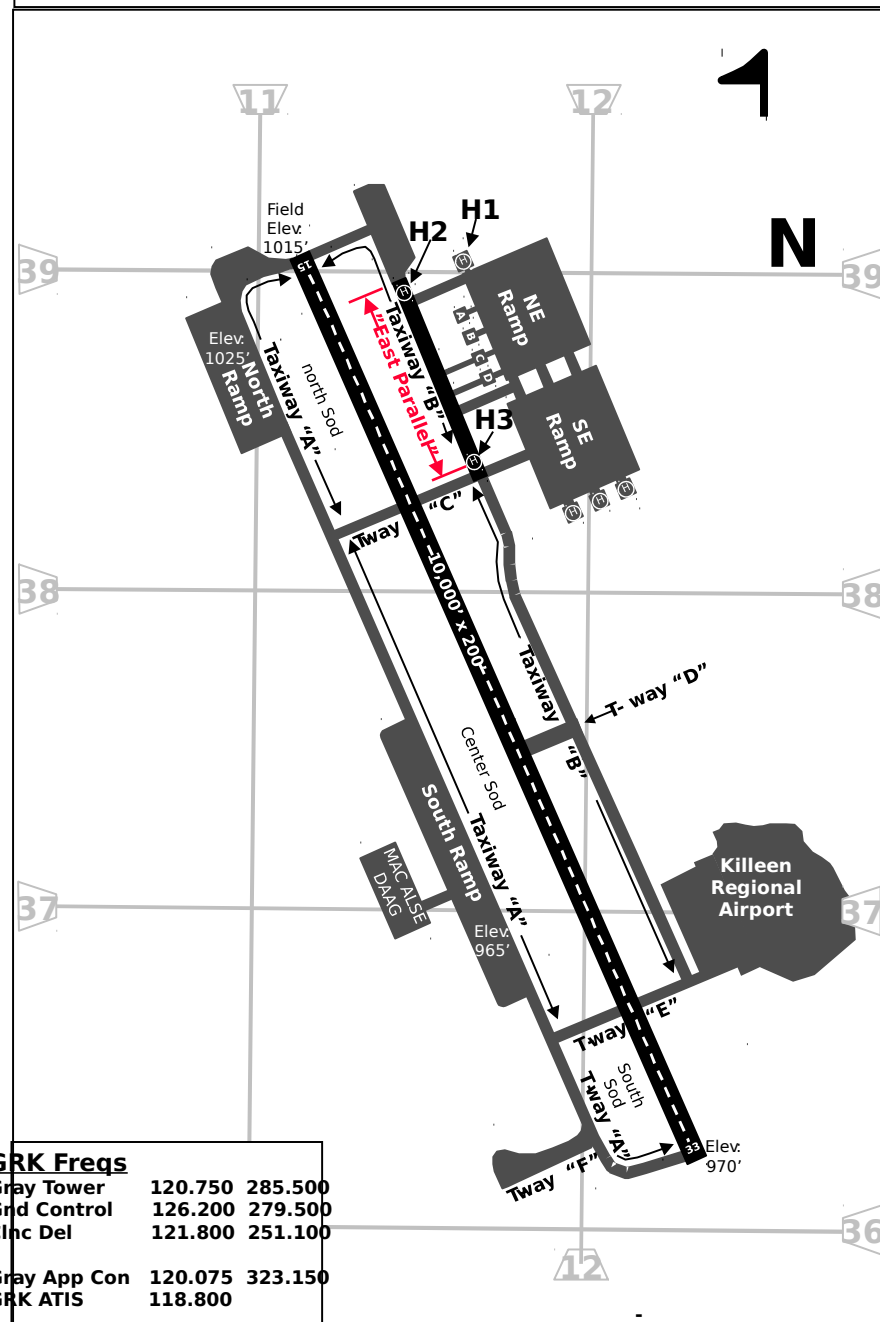
MAP / MDA /DH _____

MISSED APP PROC. _____

FINAL CHECKS

1. Instruments - Check
2. Search Lt. - On
3. Minima - _____ - Feet
4. TSD Scaling - Set
5. Before Land Check - Complete
6. CAQ - Missed Approach Point
7. Low bug settings

Airfield Diagram Killeen Regional / Robert Gray AAF



Close Combat Attack Briefing (Ground to Air)

Ground Force in Contact
C/S _____ FREQ _____

1	TGT Description	
2	TGT Location	
3	Method of Marking Friendly Position	
4	Location of TGT Reference Friendly	
5	Method of Marking TGT	
6	Desired TGT Effect	
7	REMARKS	

Lead-Wing Attack Brief (TPMR)

Do not transmit line name. Units of measure are standard unless specified.

TECHNIQUE -Running -Diving -Hovering (Left or Right Breaks)	
PATTERN -Race Track -L Attack -Clover Leaf -Wagon Wheel -Figure 8	
MUNITIONS -30mm -Rockets -Hellfire -All attempt will be made to minimize Collateral Damage	
MUNITIONS RANGE -Start Engagement -Stop Engagement -Initial Point	
REMARKS -Shooter + Shooter -Shooter + Cover	

CAS CHECK-IN (AH to JTAC/FAC)

(MNPOP)

AH-64: "_____, this is _____"
(FAC(A)/JTAC) (AH Callsign)

Identification/Mission Number: "_____"
(Be prepared to authenticate at this point)

Number and Type of Aircraft: "_____"

Position and Altitude: "_____"

Ordinance: "_____"
(Specific each AH, include type Hellfire/LASER Code)

Play Time: "_____"

*Abort Code: "-1 _____ /-2 _____"

Remarks: "_____"
(NVG,LRFD,LST,IR Pointer,FAC(A), special mission items)

*Flight lead will establish abort code

SITUATION UPDATE (JTAC/FAC to AH)

(TTFACOR)

Situation Update # _____ (JTAC/FAC to AH)

Target- General Enemy Situation: _____

Threat Activity: _____

Friendly Situation: _____

Artillery Activity/FSCM: _____

Clearance Authority: _____

Ordinance Requested: _____

Restrictions/Remarks: _____

Localized SEAD (suppression/EW): _____

Hazards (WX/Terrain/Obstructions): _____

This briefing will be general in nature, specific information is passed in the attack briefing (9/6 Line)

Following the Situation Update the JTAC/FAC will pass a game-plan brief.

Tactics, Weapon plan, LASER plan Type Control, general threat suppression or SEAD plan and any ACA/deconfliction info (Stay below/above, no closer than XXm, remain W of XXGL etc).

CAS BRIEFING (9-Line)

JTAC will not read line numbers. Lines 4, 6 and restrictions are mandatory readbacks (*). JTAC may request additional readbacks.

Type _____ (1,2, or 3) Control in effect.

1. IP/BP: _____

2. Heading: _____
(Deg Magnetic) (IP/BP to Target)

Offset: _____
(Left/Right) (When required)

3. Distance: _____
(BP to Target in meters/IP to Target in NM)

4.* Target Elevation: _____
(in feet MSL)

5. Target Description: _____

6.* Target location: _____
(Grid coords, Lat/Long, offsets or visual description)

7. Type Mark: _____ Code: _____
(WP,LASER, IR pointer, DF) (Actual Code)

8. Location of Friendlies: _____
(from target, cardinal direction and dist in meters)

9. Egress: _____

Remarks (as appropriate)

Ordinance Delivery*

Final Attack Headings*

ACA (remain S of the XX GL/No Closer than XXm)*

Threat, Location, Suppression

LTL/IR Pointer to Target Line

Active GTL/SEAD

Hazards

Danger Close + CDR Initials

TOT: _____ or TTT:"Stand by _____ + _____," "HACK"
(Min) (Sec)

Attack Brief may be followed by a target area talk-on from large to small (terrain feature to target) or using Grid Reference Graphic (GRG) or Geo-Reference imagery.

CAS COMM Cheat Card

JTAC BREVITY CODES

ABORT - (include abort code). Directive call to cease action/attack/event/mission. Abort the pass. Do not release ordnance.
CLEARED HOT – Ordnance release is authorized.
CLEARED TO ENGAGE – JTAC Type III control clearance. Attack aircraft flight leaders may initiate attacks within the parameters imposed by the JTAC. Attack platform will provide "attack complete" call to JTAC, indicating completion of ordnance release.
CONTINUE – Continue present maneuver, does not imply a change in clearance to engage or expend ordnance. Used to acknowledge aircraft without providing clearance to release ordnance.
CONTINUE DRY – Continue present maneuver, ordnance release not authorized. Used to provide approval to aircraft to continue the pass without expending ordnance during Type 1, 2 or 3* controls.
*JTAC must use "Type 3, Continue Dry" for dry Type 3 controls.

MARKING BREVITY CODES

BLIND – No visual contact with friendly aircraft/ground position. Opposite of VISUAL.
CAPTURED – Aircrew has acquired and is able to track a specified surface target with an onboard sensor.
CONTACT – 1) Sensor contact at the stated position. 2) Acknowledges sighting of a specified reference point.
NO JOY – Aircrew does not have visual contact with the target / bandit / landmark. Opposite of TALLY.
TALLY – Sighting of a target, non-friendly aircraft, landmark, or enemy position. Opposite of NO JOY.
VISUAL – Sighting of a friendly aircraft or ground position. Opposite of BLIND.

LASER BREVITY CODES

DEADEYE – Laser designator system is inoperative.
LASER ON – Start laser designation.
LASING – The speaker is firing the laser.
NEGATIVE LASER – Aircraft has not acquired laser energy.
SHIFT (direction) – Shift laser/IR/radar device energy. 1) Can be used to shift from the offset position onto the target. 2) Also used during multi aircraft attack to shift laser energy to the next target.
SPOT – Acquisition of laser designation.

CAS COMM Cheat Card

LASER BREVITY CODES

STARE (with laser code and reference point) – Cue the laser spot search/tracker function on the specified reference point.
TEN SECONDS – Stand by for "LASER ON" call in approximately 10 seconds.
TERMINATE – Stop laser illumination of a target.

NIGHT IR CAS BREVITY CODES

BURN – EO/IR illuminator is being used to provide illumination of surface points of interest.
PULSE – Illuminate(ing) an enemy position with flashing IR energy.
ROPE – Circling an IR pointer around an aircraft to help the aircraft identify the friendly ground position.
SNAKE – Oscillate / jiggle an IR pointer about a target.
SPARKLE – 1) Target marking by IR pointer. 2) Target marking by gunship/FAC(A) using incendiary rounds.
STEADY – Stop oscillation of IR pointer.
STOP – Stop IR illumination of a target.

OTHER USEFUL BREVITY CODES

BINGO – Fuel state needed for recovery.
BUSTER – Fly at maximum continuous speed (military power).
CHATTERMARK – Begin using briefed radio procedures to counter communications jamming.
IN- Mandatory call by CAS aircraft that lets the JTAC know the CAS aircraft is maneuvering for weapons firing. For type 2 CAS the call should be made prior to the aircraft entering the weapons release window for stand-off weapons. May be preceded by a "one minute" call.
JOKER – Fuel state above BINGO at which separation/bugout/event termination should begin.
PLAYTIME – time aircraft can remain on station, given in hh+mm
RIFLE – Friendly air-to-surface missile launch.
SAUNTER – Fly at best endurance.
SUNSHINE – Illuminate(ing) a target with artificial illumination.
THUNDER – One minute until A/S weapons impact.
WINCHESTER – No ordnance remaining.

6 Line Attack Briefing (CAS)

Observer/Warning Order:

“(Helo C/S) _____, this is (Observer C/S) _____, standby for 6-line”

1. Controller Position:

“My position _____ (grid, street, location, etc...) marked by _____” (talk-on, air panel, IR strobe, etc.)

2. Direction from controller to target:

“ _____ ”

(degrees magnetic / or cardinal direction)

3. Distance from controller to target:

“ _____ ” (meters)

4. Target Description “ _____ ”

5. Target marked by “ _____ ”

6. Remarks “ _____ ”

(ex: final attack heading, come over my l/r shoulder, push ASAP, report wings level, guns only, location of other friendlies)

AH64D Danger Close Weapon Ranges

30mm

2.75” Rockets

- 70m at 500m to target
- 75m at 1000m to target
- K2A = 110m
- N = 120m
- K/F = less than these
- 160m at 800m to target
- 180m at 1000m to target
- 300m at 2000m to target

9-Line MEDEVAC REQUEST

Line 1. Location of pick-up site	
Line 2. Radio Freq, callsign	
Line 3. # of patients: A- Urgent B- Urgent Surgical C- Priority D- Routine E- Convenience	
Line 4. Special equipment: A- None B- Hoist C- Extraction equipment D- Ventilator	
Line 5. # of patients: A- Litter B- Ambulatory	
Line 6. Security of pick-up site N- No enemy troops in area P- Possible enemy troops E- Enemy troops in area X- Enemy troops (escort req'd)	
Line 7. Method of marking PZ A- Panels B- Pyrotechnic Signal C- Smoke Signal D- None E- Other	
Line 8. Patient nationality/status A- US Military B- US Civilian C- Non-US Military D- Non-US Civilian E- Other	
Line 9. NBC Contamination A- Nuclear B- Biological C- Chemical	

Table 10-1. Severe Weather Warnings – High Risk

Note: All of the actions listed in the “Action” column apply to each of the warnings listed in the “Warning” column.

Warning	Action
1. Tornados and/or tropical storms.	
2. Severe thunderstorms: Maximum wind gust of 50 knots or greater, hail three-quarter inch (1.9 centimeters) or more in diameter, or both.	❶ Recall/ground all aircraft. ❷ Hangar and moor aircraft IAW pp 10-3. ❸ Secure equipment.
3. Non-convective winds greater than 50 knots.	❹ Update the IOC every 60 minutes until all aircraft and flight line equipment is secure.
4. Hail three-quarter inch (1.9 centimeters) or more in diameter.	

Aircraft actions in flight upon receipt of these warnings

1. Aircraft operating within R 6302, WTA, or immediate area:
 - a. If weather conditions associated with the warning *are not present*, immediately return to HAAF, RGAAF, or tactical field site.
 - b. If weather conditions associated with the warning *are present*, the PC will determine the best course of action and notify Hood Radio of his intentions.
2. Aircraft in the local flying area (outside of 1 above): upon receipt of the warning, the PC will determine the best course of action and notify his or her unit as soon as practicable.

Legend:

IOC – Installation Operations Center
HAAF – Hood Army Airfield
IAW – In Accordance With

PC – Pilot-in-Command
RGAAF – Robert Gray Army Airfield
WTA – Western Training Area

Table 10-2. Severe Weather Warnings – Medium Risk

Note: All of the actions listed in the “Action” column apply to each of the warnings listed in the “Warning” column.

Warning	Action
1. Moderate thunderstorms: Maximum wind gust greater than 35 knots but less than 50 knots, hail greater than one-half inch (1.27 centimeters) in diameter, but less than three-quarter inch (1.9 centimeters), or both.	❶ Within the operational capabilities of each aircraft, aviation operations in these warnings may occur; however, these missions are an automatic Medium Risk. Battalion commanders (O-5) and above will approve each mission on a case-by-case basis. ❷ Commanders will ensure aircraft and equipment on the flight line are secured.
2. Non-convective winds of 35 knots or greater, but less than 50 knots.	
3. Freezing precipitation.	

Aircraft actions in flight upon receipt of these warnings

1. Operating within the area of the warning:
 - a. If weather conditions associated with the warning *are not present*, immediately return to HAAF, RGAAF, or tactical field site.
 - b. If weather conditions associated with the warning *are present*, the PC will determine the best course of action to recover and notify Hood Radio of his or her intentions.
2. PCs may continue the briefed mission outside the area of the warning as long as they do not encounter weather conditions associated with the warning.

Legend:

GRK – Three letter FAA identifier for Robert Gray
AAF
HAAF – Hood Army Airfield
HLR – Three letter FAA identifier for Hood AAF

PC – Pilot-in-Command
RGAAF – Robert Gray Army Airfield

Table 10-3. Lighting Warnings

Note: All of the actions listed in the “Action” column apply to each of the warnings listed in the “Warning” column.

Warning	Action
Lighting warning or lighting is observed within 5 miles (8.05 kilometers).	❶ All aircraft refueling operations will cease. ❷ Commanders will take necessary actions to protect personnel and equipment.
Aircraft actions in flight upon receipt of lighting warnings/observations	
1. PCs will determine the best course of action to prevent airborne lighting strikes. 2. PCs will not takeoff in areas covered by a lighting warning. 3. Aircrews should avoid all known thunderstorms by at least 20 NM.	

Legend:

NM – Nautical Mile

PC – Pilot-in-Command

Table 10-4. Weather Watches and Advisories

Actions for severe weather watches and advisories	
1. Aviation operations may occur in areas covered by a weather watch or advisory. However, commanders will establish recovery procedures in the event a warning is issued for the weather phenomena contained in the watch/advisory. 2. PCs will establish and maintain radio/telephone contact every 30 minutes or at intermediate stops with their unit flight operations.	

Legend:

PC – Pilot-in-Command